IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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| In re Application of | Atty. Docket : NL030516US1 |
| ROBERT F. M. HENDRIKS ET AL. | CONF. NO.: 6705 |
| Serial No.: 10/556,245 | Examiner: THANH T. NGUYEN |
| Filed: NOVEMBER 10, 2005 | Group Art Unit: 2893 |

TITLE: METHOD OF PRODUCING A PLURALITY OF BODIES

**Mail Stop Appeal Brief - Patents**
**Commissioner for Patents**
**P.O. Box 1450**
**Alexandria, VA 22313-1450**

**APPEAL BRIEF**

Sir:

Appellants herewith respectfully present its Brief on Appeal as follows:

REAL PARTY IN INTEREST

The real party in interest is Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

## RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge and belief, there are no related appeals or interferences.

## STATUS OF CLAIMS

Claims 1-12 are pending in this application. Claims 1-12 are rejected in the Final Office Action that issued March 10, 2009. This rejection was upheld in an Advisory Action that mailed on May 26, 2009. Claims 1-12 are the subject of this appeal.

## STATUS OF AMENDMENTS

An Amendment After Final Action was submitted on May 11, 2009 in response to a Final Office Action mailed on March 10, 2009. The Amendment After Final Action included amendments to the claims. In an Advisory Action mailed on May 26, 2009, it is indicated that the after Amendment After Final Action will be entered but the Amendment After Final action does not place the application in condition for allowance. This Appeal Brief is in response to the Final Office Action mailed on March 10, 2009, that finally rejected claims 1-12, which remain finally rejected in the Advisory Action mailed on May 26, 2009.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention, for example as claimed in claim 1, relates to a method of producing a plurality of bodies, each body bearing an optical structure (e.g., see, Present Application, FIGs. 2a, 2b, 2c, 3a, 3b, 3c, 4a, 4b and 5, optical structure 11 and page 8, lines 31-33), the optical structures being substantially equal (e.g., see, Present Application, page 7, lines 29-33 and page 8, lines 12-14), being associated with a respective information carrier for containing user information (e.g., see, Present Application, page 11, lines 16-25), and being indicative of characteristic information for providing access to the user information (e.g., see, Present Application, page 11, lines 26-28), the method including producing a stamp by attaching particles to a surface of an auxiliary body in a pattern (e.g., see, FIG. 1, stamp 13 and particles 14, and page 7, lines 25-28), and using the attached particles on the stamp to imprint an imprintable material (e.g., see, FIG. 1, and page 7, lines 25-28), thereby producing the plurality of bodies, the each body having at least a surface portion bearing a direct imprint of the particle pattern in the

stamp (e.g., see, Present Application, FIGs. 1, 2a, 2b, 2c, 3a, 3b, 3c and 4b, and page 7, lines 25-28).

It should be explicitly noted that it is not the Appellants' intention that the currently claimed device and method be limited to operation within the illustrative device and method described above beyond what is required by the claim language. Further description of the illustrative device and method is provided above indicating portions of the claims which cover the illustrative device and method merely for compliance with requirements of this appeal without intending any further interpreted limitations be read into the claims as presented.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claim 1 of U.S. Patent Application Serial No. 10/556,245 is anticipated 35 U.S.C. §102(b) over U.S. Patent Publication No. 2003/0129654 to Ravkin ("Ravkin").

Whether claims 2-4, 6, 8-10 and 12 of U.S. Patent Application Serial No. 10/556,245 is obvious under 35 U.S.C. §103(a) over Ravkin in view of U.S. Patent No. 6,309,726 to Ono ("Ono").

Whether claims 5 and 7 of U.S. Patent Application Serial No. 10/556,245 is obvious under 35 U.S.C. §103(a) over Ravkin in view of Ono in further view of U.S. Patent Publication No. 2002/0039346 to Abe ("Abe").

Whether claim 11 of U.S. Patent Application Serial No. 10/556,245 is obvious under 35 U.S.C. §103(a) over Ravkin in view of U.S. Patent Publication No. 2002/0053735 to Neuhaus ("Neuhaus").

## ARGUMENT

Claim 1 is said to be anticipated by Ravkin.

Appellants respectfully request the Board to address the patentability of independent claim 1, and further claims 2-12 as respectively depending from independent claim 1, based on the requirements of independent claim 1. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, Appellants herein specifically reserve the right to argue and address the patentability of claims 2-12 at a later date should the separately patentable subject matter of claims 2-12 later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of independent claim 1 is not intended as a waiver of Appellants' right to argue the patentability of the further claims and claim elements at that later time.

Ravkin shows a system using coded particles to form positionally flexible arrays of samples and/or reagents in which

the samples and/or reagents are identified by codes on the particles (See, Ravkin, abstract).

The Final Office Action relies on Ravkin for showing "producing a stamp (1320, see fig. 55, paragraph# 456) by attaching particles (1314, see paragraph# 454) to a surface of an auxiliary body (1330, see figure 55, paragraph# 456-457)" (see, Final Office Action, page 3), however, it is respectfully submitted that reliance on Ravkin is misplaced.

While FIG. 55 does show a "[s]ystem 1320 for forming imprinted particles" (see, Ravkin, paragraph [0456]), in Ravkin, it is clear that it is the "particles" that are imprinted on as opposed to the present system wherein it is the particles that are used to imprint an imprintable material as substantially recited in claim 1.

For example, Ravkin explains in a FIELD OF THE INVENTION section that (emphasis added) "the invention [of Ravkin] relates to systems using coded particles for multiplexed analysis of biological samples or reagents." (See, Ravkin, paragraph [0011].) Ravkin makes clear that (emphasis added) "[t]he invention [of Ravkin] provides systems including apparatus, methods, compositions, and kits for multiplexed analysis of samples using

coded particles ..." (See, Ravkin, paragraph [0078].) For example, Ravkin explains that (emphasis added) "FIG. 1 shows a perspective view of an embodiment of a coded particle 70 for multiplexed analysis of biological samples." (See, Ravkin, paragraph [0080].) While it is clear that an applicant may be his own lexicographer, Ravkin unequivocally defines a particle as "[p]articles generally comprise any structure capable of associating a sample and/or reagent with a code for a nonpositional and/or positional assay." (See, Ravkin, paragraph [0109].)

Accordingly, as clear to a person of ordinary skill in the art from Ravkin, the particles of Ravkin are small bodies that are utilized to enable an analysis of biological samples and are not the particles of the present system. While it is true that Ravkin explains that (emphasis added) "[t]he particle surface may be modified to include surface relief. Features that define surface relief include any local deviation from a flat or convexly contoured surface, generally on an exterior surface of a particle ... The surface relief features may be molded, stamped, etched, cut, added by fusion, and/or the like " (See, Ravkin, paragraph [0131].)

Accordingly, in the terms of Ravkin, the surface relief structures are the structures that may be formed by a stamp. Ravkin further explains that (emphasis added) "[s]urface topography or surface relief may be formed by any suitable method, including stamping, molding, and etching, among others. In some embodiments, the code is stamped or imprinted in the particle by controlled deformation of a surface of a particle precursor or progenitor material, using a die. In imprinting, the die has a topography that shapes a generally complementary topography of surface relief on the resulting particle." (See, Ravkin, paragraph [0409].) "A topographic or surface-relief code is defined by surface relief features. The features may be formed on particles by any suitable process, including stamping an imprint in a particle precursor material ..." (See, Ravkin, paragraph [0417], emphasis added.)

Accordingly, while it is clear that Ravkin shows use of a die to impart surface relief structures on a particle as appreciated by anyone of ordinary skill in the art, however, it is respectfully submitted that Ravkin makes clear that the die of Ravkin is produced in a way that is ordinary to those skilled in the art and

that is completely different than recited in the claims of the present system.

Ravkin explains that (emphasis added) "[s]urface relief on a die or mold may be formed by selective removal, deposition, or other restructuring of die- or mold-forming materials. Thus, features [on the die] may be formed by soft lithography, photolithography followed by chemical etching, laser etching, crystal growth, and/or so on." (See, Ravkin, paragraph [0431].) Accordingly, Ravkin teaches formation of the die using typical micromachining process such as lithography and etching of the die to produce surface relief structures on the die as typical in prior die forming systems. Ravkin goes on to explain that "[t]opographic structure may be formed in a particle precursor material by stamping. Stamping [as illustrated in FIG. 55 cited in the Final Office Action] generally comprises contacting precursor material with a die and applying pressure ..." (See, Ravkin, paragraph [0431].)

Accordingly, while "FIG. 52 [cited in the Final Office Action] shows a die 1310 used to produce a particular code pattern. Over the die surface, the die includes at least one group 1312 of

features 1314 that will form the code pattern." Ravkin nonetheless is clear that the (emphasis added) "[d]ie 1310 is manufactured using known methods of micro-machining ..." (See, Ravkin, paragraph [0453].)

While Ravkin in "FIGS. 53 and 54 show magnified views of exemplary die features" (see, Ravkin, paragraph [0454]), as should now be clear, these features are formed simply by standard micromachining processes. Accordingly, while "FIG. 55 shows a system 1320 for forming imprinted particles" (see, Ravkin, paragraph [0456]) as cited in the Final Office Action, it is the particles that are imprinted by the die as opposed to the present system, wherein a stamp is produced by attaching particles to a surface ...

As should be clear from the above, Ravkin has little to do with the claims of the present system.

Accordingly, the "features 1314" that are cited in the Final Office Action (see, Final Office Action, page 3, first paragraph) as corresponding to the "particles" of the present system are formed by conventional micromachining processes such as lithography and etching. Clearly these features 1314 are not produced by

attaching particles to a surface as provided in the presently claimed system.

The Advisory Action takes a position that the above noted sections of Ravkin show the features of the claims, however, as clear to a person of ordinary skill in the art, Ravkin in the cited sections or in any sections for that matter, has nothing to due with the pending claims.

The Advisory Action further takes a position that "nowhere in the claims define the particle having specific material/dimension ... etc. Therefore, any small bodies can use as particles." While it is true that the claims due not impose any particular materials or dimensions on the particles, nonetheless, as recited in the claims, the attached particles on the stamp must be used to imprint an imprintable material, thereby producing the plurality of bodies.

As should be clear from the above detailed discussion of Ravkin, the particles of Ravkin are not utilized to imprint an imprintable body and therefore the particles of Ravkin have nothing to do with the presently pending claims.

It is respectfully submitted that the method of claim 1 is not anticipated or made obvious by the teachings of Ravkin. For

example, Ravkin does not teach, disclose or suggest, a method that amongst other patentable elements, comprises (illustrative emphasis added) "producing a stamp by attaching particles to a surface of an auxiliary body in a pattern; and using the attached particles on the stamp to imprint an imprintable material, thereby producing the plurality of bodies, the each body having at least a surface portion bearing an a direct imprint of the particle pattern in the stamp" as recited in claim 1. Each of Ono, Abe and Neuhaus are introduced for allegedly showing elements of the dependent claims and as such, do nothing to cure the deficiencies in Ravkin.

Based on the foregoing, the Appellants respectfully submit that independent claim 1 is patentable over Ravkin and notice to this effect is earnestly solicited.

Claims 2-4, 6, 8-10 and 12 are said to be unpatentable over Ravkin in view of Ono.

Ono is cited for allegedly showing elements of the dependent claims yet does not cure the deficiencies in Ravkin. Accordingly, it is respectfully submitted that claims 2-4, 6, 8-10 and 12 are

allowable at least based on its dependence from independent claim 1.

Claims 5 and 7 are said to be unpatentable over Ravkin in view of Ono in further view of Abe.

Abe is cited for allegedly showing elements of the dependent claims yet does not cure the deficiencies in each of Ravkin and Ono. Accordingly, it is respectfully submitted that claims 5 and 7 are allowable at least based on its dependence from independent claim 1.

Claim 11 is said to be unpatentable over Ravkin in view of Neuhaus.

Neuhaus is cited for allegedly showing elements of the dependent claims yet does not cure the deficiencies in Ravkin. Accordingly, it is respectfully submitted that claim 11 is allowable at least based on dependence from independent claim 1.

In addition, Appellants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Appellants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

## CONCLUSION

Claims 1-12 are patentable over any of Ravkin alone and in view of any combination of Ono, Abe, Neuhaus.

Thus the Examiner's rejection of claims 1-12 should be reversed.

Respectfully submitted,

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**APPENDIX A**

**CLAIMS ON APPEAL**

1. (Previously presented) A method of producing a plurality of bodies, each body bearing an optical structure, the optical structures being substantially equal, being associated with a respective information carrier for containing user information, and being indicative of characteristic information for providing access to the user information, the method comprising acts of:

producing a stamp by attaching particles to a surface of an auxiliary body in a pattern; and

using the attached particles on the stamp to imprint an imprintable material, thereby producing the plurality of bodies, the each body having at least a surface portion bearing a direct imprint of the particle pattern in the stamp.

2. (Previously presented) The method as claimed in claim 1, comprising an act of applying to the imprint of the each body a layer of reflecting material having a surface facing away from the imprint, which surface substantially follows the imprint.

3. (Previously presented) The method as claimed in claim 1, comprising acts of:

applying over the imprint of the each body a layer of another, substantially transparent, imprintable material;

using the stamp an additional time to imprint the layer of the other imprintable material, thereby making an additional imprint on the each body.

4. (Previously presented) The method as claimed in claim 1, comprising acts of:

producing an additional stamp by attaching particles to a surface of an additional auxiliary body;

applying a layer of an other, substantially transparent, imprintable material over the imprint of the each body;

using the additional stamp to imprint the layer of the other imprintable material, thereby making an additional imprint on the each body.

5. (Previously presented) The method as claimed in claim 3, wherein the imprintable material used has a first refractive index, and the other imprintable material has a second refractive index, the second refractive index being different from the first refractive index.

6. (Previously presented) The method as claimed in claim 3, comprising an act of interposing a substantially transparent separation layer between the imprint and the layer of the other imprintable material of the each body.

7. (Previously presented) The method as claimed in claim 6, wherein the imprintable material used has a first refractive index, and the separation layer has a third refractive index, the third refractive index being different from the first refractive index.

8. (Previously presented) The method as claimed in claim 1, comprising an act of applying a substantially transparent covering layer over the imprint of the each body.

9. (Previously presented) The method as claimed in claim 1, wherein the each body is a laminated body comprising a reflective layer.

10. (Previously presented) The method as claimed in claim 1, wherein the each body is integral with the respective information carrier.

11. (Previously presented) The method as claimed in claim 1, wherein particles of diamond are used as the particles.

12. (Previously presented) The method as claimed in claim 1, wherein particles having a size ranging between 100 nm and 1μm are used as the particles.

## APPENDIX B

## Evidence on Appeal

None

## APPENDIX C

## Related Proceedings of Appeal

None